

EX03-078C-US patentin.txt
SEQUENCE LISTING

<110> EXELIXIS, INC.
<120> MAP2K6 AS MODIFIER OF BRANCHING MORPHOGENESIS AND METHODS OF USE
<130> EX03-078C-US
<150> US 60/420,554
<151> 2002-10-23
<160> 3
<170> PatentIn version 3.2
<210> 1
<211> 2924
<212> DNA
<213> Homo sapiens
<400> 1
ggcttctggt tcggcccacc tctgaagggt ccagaatcga tagtgaattc gtggttccaa 60
gtttggagct tttagctgcc agccctggcc catcatgtag ctgcagcaca gccttcacct 120
acgttgcaac tgggggaaaa atcactttcc agtctgtttt gcaagggtgt catttccatc 180
ttgattccct gaaagtccat ctgctgcatc ggtcaagaga aactccactt gcatgaagat 240
tgcacgcctg cagcttgcat ctttgttgca aaactagcta cagaagagaa gcaaggcaaa 300
gtcttttgtg ctcccctccc ccatcaaagg aaaggggaaa atgtctcagt cgaaaggcaa 360
gaagcgaaac cctggcctta aaattccaaa agaagcattt gaacaacctc agaccagttc 420
cacaccacct cgagatttag actccaaggc ttgcatttct attggaaatc agaactttga 480
ggtgaaggca gatgacctgg agcctataat ggaactggga cgagggtcgt acggggtggt 540
ggagaagatg cggcacgtgc ccagcgggca gatcatggca gtgaagcgga tccgagccac 600
agtaaatagc caggaacaga aacgggtact gatggatttg gatatttcca tgaggacggt 660
ggactgtcca ttcactgtca ccttttatgg cgcactgttt cgggaggggtg atgtgtggat 720
ctgcatggag ctcatggata catcactaga taaattctac aaacaagtta ttgataaagg 780
ccagacaatt ccagaggaca tcttagggaa aatagcagtt tctattgtaa aagcattaga 840
acatttacat agtaagctgt ctgtcattca cagagacgtc aagccttcta atgtactcat 900
caatgtcttc ggtcaagtga agatgtgcga ttttggaatc agtggctact tgggtggactc 960
tgttgctaaa acaattgatg caggttgcaa accatacatg gcccctgaaa gaataaacc 1020
agagctcaac cagaagggat acagtgtgaa gtctgacatt tggagtctgg gcatcacgat 1080
gattgagttg gccatccttc gatttcccta tgattcatgg ggaactccat ttcagcagct 1140
caaacagggtg gtagaggagc catcgccaca actcccagca gacaagttct ctgcagagtt 1200
tgttgacttt acctcacagt gcttaaagaa gaattccaaa gaacggccta cataccaga 1260

EX03-078C-US patentin.txt

gctaattgcaa catccatttt tcaccctaca tgaatccaaa ggaacagatg tggcatcttt	1320
tgtaaaactg attcttggag actaaaaagc agtggactta atcggttgac cctactgtgg	1380
attggtgggt ttcgggggtga agcaagttca ctacagcatc aatagaaagt catctttgag	1440
ataatttaac cctgcctctc agaggggttt ctctcccaat tttcttttta ctccccctct	1500
taagggggcc ttggaatcta tagtatagaa tgaactgtct agatggatga attatgataa	1560
aggcttagga cttcaaaagg tgattaaata tttaatgatg tgtcatatga gtcctcaagc	1620
ttctcagact tctcttattc tttaaaaaat gaatgcattg gccctgacaa aaagggtgcta	1680
cggtagtgat gaaattataa gtagatttgt agtttgtccc atttattatt ttaatattta	1740
tgtttaagtg cttggttgaa aagattccat ttataacaag aaggggagatt caaaaaaaaa	1800
atataagggtt ggggttagcaa tatttatagg gcttttattt ttttaagttca attgtgtctg	1860
tggtccagaa gaaattattt aatatgcatc tttgagaata ttataaaaa atcaaaaagg	1920
agctcttctt gtgaaatgtc tgttccagct gttgtgactg ctgccatttt tggaaacatc	1980
tgccaatcc tgggtgatca ccacatcttt taggggaagt gacaagatgc tctggtcata	2040
ctctttttcc caactttgga aaacataaaa atcactcata taacagctca aagagtaaaa	2100
catttggttc ttctgacact tgtggtatag tattagtgga aagtgatttg taatatgatt	2160
ttatatccac ctacctattc atctacctgt gtgtatgtgt gtgtttgtgt gtctatttgg	2220
caattcaciaa gtcctgcaa gtggtttcta tgagcatctc tgtttggtaa ggaggacaat	2280
tgtcagtttt gagggggaca tgtgttaaata cacagaaaaa aatgggtgcct tcttctgcgt	2340
ttgtccctcc tgccatgtgt aagttgtaag gattgccttt gtagttaatg tactctttgg	2400
ctttgtttgt ttgttttctt cttcagtga gacagccttac tattcataga agggctagaa	2460
taggagaaaa tgaaaggtag tgagtaattc ttgataaga tgaggaaata atgggaaagg	2520
ttgaattaat tcctgggcat ggactaccag atgaccacaa gttgcgttga ggccgcatct	2580
ttcttcagca gcgtgcaata gctggctcct ctataggaga tgagcttcat tgggagtcc	2640
tagcaagttg actaaacagc aaaagtctt tctcgtgggt aaatataccc acagggttcta	2700
tgattttag ctctaggttt cttgatgatc aaggagtga gtaattgaca gggaaaatat	2760
agacctatga taaataacca ggaagcattg cttttggaca aggaagaaca gagggttttg	2820
attttaaaaa gaagaaaaaa aaaccttatt ttttctttct tggcctcaag ttcaatatgg	2880
agaggattgc ttccctgaat cctctcttcc tttccctttt agag	2924

<210> 2
 <211> 2820
 <212> DNA
 <213> Homo sapiens
 <400> 2

EX03-078C-US patentin.txt

gcagagtgtt gctgtgtgtg cttgtgattt gtattttatt tgatgtaaac gtgaaggcag	60
agtattttct aacactgtaa ttcaactagg ttttgtgtct cctggatcta tttttttttc	120
ttgtttgttct gaggagctga tatacttgga aatattaggt ttaagatatg cagatgtcca	180
acttatatac atagtcaagg gtttagagtc tggagacagg aggctggcaa tttcaactag	240
ggggcaggtc aggcaagaag cgaaaccctg gccttaaaat tccaaaagaa gcatttgaac	300
aacctcagac cagttccaca ccacctcgag atttagactc caaggcttgc atttctattg	360
gaaatcagaa ctttgagggtg aaggcagatg acctggagcc tataatggaa ctgggacgag	420
gtgcgtagcg ggtggtggag aagatgcggc acgtgcccag cgggcagatc atggcagtga	480
agcggatccg agccacagta aatagccagg aacagaaacg gctactgatg gatttggata	540
tttccatgag gacggtggac tgtccattca ctgtcacctt ttatggcgca ctgtttcggg	600
agggtgatat gtggatctgc atggagctca tggatacatc actagataaa ttctacaaac	660
aagtatttga taaaggccag acaattccag aggacatctt agggaaaata gcagtttcta	720
ttgtaaaagc attagaacat ttacatagta agctgtctgt cattcacaga gacgtcaagc	780
cttctaattg actcatcaat gctctcggc aagtgaagat gtgcgatttt ggaatcagtg	840
gctacttggg ggactctgtt gctaaaacaa ttgatgcagg ttgcaaacca tacatggccc	900
ctgaaagaat aaaccagag ctcaaccaga agggatacag tgtgaagtct gacatttggg	960
gtctgggcat cacgatgatt gagttggcca tccttcgatt tccctatgat tcatggggaa	1020
ctccatttca gcagctcaaa cagggtgtag aggagccatc gccacaactc ccagcagaca	1080
agttctctgc agagtttgtt gactttacct cacagtgcct aaagaagaat tccaaagaac	1140
ggcctacata cccagagcta atgcaacatc catttttcac cctacatgaa tccaaaggaa	1200
cagatgtggc atcttttgta aaactgattc ttggagacta aaaagcagtg gacttaatcg	1260
gttgacccta ctgtggattg gtgggtttcg ggggtgaagca agttcactac agcatcaata	1320
gaaagtcatc tttgagataa ttttaaccctg cctctcagag ggttttctct cccaattttc	1380
tttttactcc cctctttaag ggggccttgg aatctatagt atagaatgaa ctgtctagat	1440
ggatgaatta tgataaaggc ttaggacttc aaaaggatgat taaatattta atgatgtgtc	1500
atatgagtcc tcaagcttct cagacttctc ttattcttta caaatgaat gcattggccc	1560
tgacaaaaag gtgctacggg agtgatgaaa ttataagtag atttgtagtt tgtcccattt	1620
attattttta tatttatgtt taagtgcctg gttgaaaaga ttccatttta tacaagaagg	1680
gagattcaaa aaaaaaatat aagggtgggt tagcaatatt tatagggctt ttatttttta	1740
agttcaattg tgtctgtggg ccagaagaaa ttatttaata tgcacttttg agaatattat	1800
aaaaatatca aaaaggagct cttcttgtga aatgtctgtt ccagctgttg tgactgctgc	1860
catttttggg aacatctgcc caatcctggg tgatcaccac atcttttagg ggaagtgaca	1920

EX03-078C-US patentin.txt

```

agatgctctg gtcatactct ttttcccaac tttggaaaac ataaaaatca ctcatataac 1980
agctcaaaga gtaaaacatt tggttcttct gacacttggt gtatagtatt agtgggaaagt 2040
gatttgtaat atgattttat atccacctac ctattcatct acctgtgtgt atgtgtgtgt 2100
ttgtgtgtct atttggcaat tcacaagtcc tgccaagtgg tttctatgag catctctgtt 2160
tggttaaggag gacaattgtc agttttgagg gggacatgtg ttaaatacaca gaaaaaaatg 2220
gtgccttctt ctgctgttgt ccttcctgcc atgtgtaagt tgtaaggatt gcctttgtag 2280
ttaatgtact ctttggcttt gtttgtttgt tttcttcttc agtgaagcag ctttactatt 2340
catagaaggg ctagaatagg agaaaaatgaa aggtagtgtg taattctttg ataagatgag 2400
gaaataatgg gaaagggtga attaattcct gggcatggac taccagatga ccacaagttg 2460
cgttgaggcc gcatctttct tcagcagcgt gcaatagctg gctcctctat aggagatgag 2520
cttcattggg agttcctagc aagttgacta aacagcaaaa gttctttctc gtgggtaaat 2580
ataccacag gttctatgat ttgtagctct aggtttcttg atgatcaagg agtgaagtaa 2640
ttgacagggg aaatatagac ctatgataaa taaccaggaa gcattgcttt tggacaagga 2700
agaacagagg gttttgattt taaaaagaag aaaaaaaaaac cttatttttt ctttcttggc 2760
ctcaagttca atatggagag gattgcttcc ctgaatcctc tcttccttcc ctttttagag 2820

```

```

<210> 3
<211> 334
<212> PRT
<213> Homo sapiens

```

```
<400> 3
```

```
Met Ser Gln Ser Lys Gly Lys Lys Arg Asn Pro Gly Leu Lys Ile Pro
1          5          10          15
```

```
Lys Glu Ala Phe Glu Gln Pro Gln Thr Ser Ser Thr Pro Pro Arg Asp
          20          25          30
```

```
Leu Asp Ser Lys Ala Cys Ile Ser Ile Gly Asn Gln Asn Phe Glu Val
          35          40          45
```

```
Lys Ala Asp Asp Leu Glu Pro Ile Met Glu Leu Gly Arg Gly Ala Tyr
          50          55          60
```

```
Gly Val Val Glu Lys Met Arg His Val Pro Ser Gly Gln Ile Met Ala
65          70          75          80
```

```
Val Lys Arg Ile Arg Ala Thr Val Asn Ser Gln Glu Gln Lys Arg Leu
          85          90          95
```

EX03-078C-US patentin.txt

Leu Met Asp Leu Asp Ile Ser Met Arg Thr Val Asp Cys Pro Phe Thr
 100 105 110
 Val Thr Phe Tyr Gly Ala Leu Phe Arg Glu Gly Asp Val Trp Ile Cys
 115 120 125
 Met Glu Leu Met Asp Thr Ser Leu Asp Lys Phe Tyr Lys Gln Val Ile
 130 135 140
 Asp Lys Gly Gln Thr Ile Pro Glu Asp Ile Leu Gly Lys Ile Ala Val
 145 150 155 160
 Ser Ile Val Lys Ala Leu Glu His Leu His Ser Lys Leu Ser Val Ile
 165 170 175
 His Arg Asp Val Lys Pro Ser Asn Val Leu Ile Asn Ala Leu Gly Gln
 180 185 190
 Val Lys Met Cys Asp Phe Gly Ile Ser Gly Tyr Leu Val Asp Ser Val
 195 200 205
 Ala Lys Thr Ile Asp Ala Gly Cys Lys Pro Tyr Met Ala Pro Glu Arg
 210 215 220
 Ile Asn Pro Glu Leu Asn Gln Lys Gly Tyr Ser Val Lys Ser Asp Ile
 225 230 235 240
 Trp Ser Leu Gly Ile Thr Met Ile Glu Leu Ala Ile Leu Arg Phe Pro
 245 250 255
 Tyr Asp Ser Trp Gly Thr Pro Phe Gln Gln Leu Lys Gln Val Val Glu
 260 265 270
 Glu Pro Ser Pro Gln Leu Pro Ala Asp Lys Phe Ser Ala Glu Phe Val
 275 280 285
 Asp Phe Thr Ser Gln Cys Leu Lys Lys Asn Ser Lys Glu Arg Pro Thr
 290 295 300
 Tyr Pro Glu Leu Met Gln His Pro Phe Phe Thr Leu His Glu Ser Lys
 305 310 315 320
 Gly Thr Asp Val Ala Ser Phe Val Lys Leu Ile Leu Gly Asp
 325 330

EX03-078C-US patentin.txt
SEQUENCE LISTING

<110> EXELIXIS, INC.

<120> MAP2K6 AS MODIFIER OF BRANCHING MORPHOGENESIS AND METHODS OF USE

<130> EX03-078C-US

<150> US 60/420,554

<151> 2002-10-23

<160> 3

<170> PatentIn version 3.2

<210> 1

<211> 2924

<212> DNA

<213> Homo sapiens

<400> 1

ggcttctggt tcggcccacc tctgaagggt ccagaatcga tagtgaattc gtggttccaa	60
gtttggagct ttagctgcc agccctggcc catcatgtag ctgcagcaca gccttcccta	120
acgttgcaac tgggggaaaa atcactttcc agtctgtttt gcaagggtgtg catttccatc	180
ttgattccct gaaagtcctat ctgctgcatc ggtcaagaga aactccactt gcatgaagat	240
tgcacgcctg cagcttgcat ctttgttgca aaactagcta cagaagagaa gcaaggcaaa	300
gtcttttgtg ctcccctccc ccatcaaagg aaaggggaaa atgtctcagt cgaaaggcaa	360
gaagcgaaac cctggcctta aaattccaaa agaagcattt gaacaacctc agaccagttc	420
cacaccacct cgagatttag actccaaggc ttgcatttct attggaaatc agaactttga	480
ggtgaaggca gatgacctgg agcctataat ggaactggga cgagggtcgt acgggggtgt	540
ggagaagatg cggcacgtgc ccagcgggca gatcatggca gtgaagcgga tccgagccac	600
agtaaatagc caggaacaga aacggctact gatggatttg gatatttcca tgaggacggt	660
ggactgtcca ttcactgtca ccttttatgg cgcactgttt cgggaggggtg atgtgtggat	720
ctgcatggag ctcatggata catcactaga taaattctac aaacaagtta ttgataaagg	780
ccagacaatt ccagaggaca tcttagggaa aatagcagtt tctattgtaa aagcattaga	840
acatttacat agtaagctgt ctgtcattca cagagacgtc aagccttcta atgtactcat	900
caatgtcttc ggtcaagtga agatgtgcga ttttggaatc agtggctact tgggtggactc	960
tgttgctaaa acaattgatg caggttgcaa accatacatg gcccctgaaa gaataaaccc	1020
agagctcaac cagaagggat acagtgtgaa gtctgacatt tggagtctgg gcatcacgat	1080
gattgagttg gccatccttc gatttcccta tgattcatgg ggaactccat ttcagcagct	1140
caaacagggtg gtagaggagc catcgccaca actcccagca gacaagttct ctgcagagtt	1200
tgttgacttt acctcacagt gcttaaagaa gaattccaaa gaacggccta catacccaga	1260

EX03-078C-US patentin.txt

gctaatagcaa catccatttt tcaccctaca tgaatccaaa ggaacagatg tggcatcttt	1320
tgtaaaactg attcttggag actaaaaagc agtggactta atcggttgac cctactgtgg	1380
attggtgggt ttcggggtga agcaagttca ctacagcatc aatagaaagt catctttgag	1440
ataatttaac cctgcctctc agaggggttt ctctcccaat tttcttttta ctccccctct	1500
taagggggcc ttggaatcta tagtatagaa tgaactgtct agatggatga attatgataa	1560
aggcttagga cttcaaaagg tgattaaata tttaatgatg tgtcatatga gtcctcaagc	1620
ttctcagact tctcttattc tttaaaaaat gaatgcattg gccctgacaa aaagggtgcta	1680
cggtagtgat gaaattataa gtagatttgt agtttgtccc atttattatt ttaatatatta	1740
tgtttaagtg cttggttgaa aagattccat ttataacaag aaggaggatt caaaaaaaaa	1800
atataagggt ggggttagcaa tatttatagg gcttttattt ttttaagttca attgtgtctg	1860
tgggtccagaa gaaattattt aatatgcatc tttgagaata ttataaaaaat atcaaaaagg	1920
agctcttctt gtgaaatgtc tgttccagct gttgtgactg ctgccatttt tggaaacatc	1980
tgccaatcc tgggtgatca ccacatcttt taggggaagt gacaagatgc tctggtcata	2040
ctctttttcc caactttgga aaacataaaa atcactcata taacagctca aagagtaaaa	2100
catttggttc ttctgacact tgtggtatag tattagtggg aagtgatttg taatatgatt	2160
ttatatccac ctacctattc atctacctgt gtgtatgtgt gtgtttgtgt gtctatttgg	2220
caattcacia gtcctgccaa gtggtttcta tgagcatctc tgtttggtaa ggaggacaat	2280
tgtcagtttt gagggggaca tgtgttaaata cacagaaaaa aatgggtgcct tcttctgcgt	2340
ttgtccctcc tgccatgtgt aagttgtaag gattgccttt gtagttaatg tactctttgg	2400
ctttgtttgt ttgttttctt cttcagtgaa gcagccttac tattcataga agggctagaa	2460
taggagaaaa tgaaaggtag tgagtaattc ttgataaga tgaggaaata atgggaaagg	2520
ttgaattaat tcctgggcat ggactaccag atgaccacaa gttgcgttga ggccgcatct	2580
ttcttcagca gcgtgcaata gctggctcct ctataggaga tgagcttcat tgggagttcc	2640
tagcaagttg actaaacagc aaaagttctt tctcgtgggt aaatataccc acaggttcta	2700
tgatttgtag ctctaggttt cttgatgatc aaggagtga gtaattgaca gggaaaatat	2760
agacctatga taaataacca ggaagcattg cttttggaca aggaagaaca gagggttttg	2820
attttaaaaa gaagaaaaaa aaaccttatt ttttctttct tggcctcaag ttcaatatgg	2880
agaggattgc ttccctgaat cctctcttcc ttcccccttt agag	2924

<210> 2
 <211> 2820
 <212> DNA
 <213> Homo sapiens

<400> 2

EX03-078C-US patentin.txt

gcagagtgtt gctgtgtgtg cttgtgattt gtattttatt tgatgtaaac gtgaaggcag	60
agtattttct aacactgtaa ttcaactagg ttttgtgtct cctggatcta ttttttttc	120
ttgttgttct gaggagctga tatacttgga aatattaggt ttaagatatg cagatgtcca	180
acttatatac atagtcaagg gtttagagtc tggagacagg aggctggcaa tttcaactag	240
ggggcaggtc aggcaagaag cgaaaccctg gccttaaaat tccaaaagaa gcatttgaac	300
aacctcagac cagttccaca ccacctcgag atttagactc caaggcttgc atttctattg	360
gaaatcagaa ctttgagggtg aaggcagatg acctggagcc tataatggaa ctgggacgag	420
gtgctgtacgg ggtggtggag aagatgcggc acgtgcccag cgggcagatc atggcagtga	480
agcggatccg agccacagta aatagccagg aacagaaaacg gctactgatg gatttggata	540
tttccatgag gacggtggac tgtccattca ctgtcacctt ttatggcgca ctgtttcggg	600
agggtgatat gtggatctgc atggagctca tggatacatc actagataaa ttctacaaac	660
aagttattga taaaggccag acaattccag aggacatctt agggaaaata gcagtttcta	720
ttgtaaaagc attagaacat ttacatagta agctgtctgt cattcacaga gacgtcaagc	780
cttctaattgt actcatcaat gctctcggc aagtgaagat gtgcgatttt ggaatcagtg	840
gctacttggg ggactctgtt gctaaaacaa ttgatgcagg ttgcaaacca tacatggccc	900
ctgaaagaat aaaccagag ctcaaccaga agggatacag tgtgaagtct gacatttggg	960
gtctgggcat cacgatgatt gagttggcca tccttcgatt tccctatgat tcatggggaa	1020
ctccatttca gcagctcaaa caggtagtag aggagccatc gccacaactc ccagcagaca	1080
agttctctgc agagtttgtt gactttacct cacagtgcct aaagaagaat tccaaagaac	1140
ggcctacata cccagagcta atgcaacatc catttttcac cctacatgaa tccaaaggaa	1200
cagatgtggc atcttttgta aaactgattc ttggagacta aaaagcagtg gacttaatcg	1260
gttgacccta ctgtggattg gtgggtttcg ggggtgaagca agttcactac agcatcaata	1320
gaaagtcatc tttgagataa tttaaccctg cctctcagag ggttttctct cccaattttc	1380
tttttactcc cctcttaag ggggccttgg aatctatagt atagaatgaa ctgtctagat	1440
ggatgaatta tgataaaggc ttaggacttc aaaagggtgat taaatattta atgatgtgtc	1500
atatgagtcc tcaagcttct cagacttctc ttattcttta caaatgaat gcattggccc	1560
tgacaaaaag gtgctacggg agtgatgaaa ttataagtag attttagatt tgtcccattt	1620
attattttta tatttatgtt taagtgcctg gttgaaaaga ttccatttta tacaagaagg	1680
gagattcaaa aaaaaaatat aagggtgggt tagcaatatt tatagggctt ttatttttta	1740
agttcaattg tgtctgtggg ccagaagaaa ttatttaata tgcacttttg agaatattat	1800
aaaaatatca aaaaggagct cttcttgtga aatgtctgtt ccagctgttg tgactgctgc	1860
catttttggg aacatctgcc caatcctggg tgatcaccac atcttttagg ggaagtgaca	1920

EX03-078C-US patentin.txt

```

agatgctctg gtcataactct ttttcccaac tttggaaaac ataaaaatca ctcatataac 1980
agctcaaaga gtaaaacatt tggttcttct gacacttggtg gtatagtatt agtggaaagt 2040
gatttgtaat atgattttat atccacctac ctattcatct acctgtgtgt atgtgtgtgt 2100
ttgtgtgtct atttggaat tcacaagtcc tgccaagtgg tttctatgag catctctgtt 2160
tggttaaggag gacaattgtc agttttgagg gggacatgtg ttaaatacaca gaaaaaaatg 2220
gtgccttctt ctgcgtttgt ccttcctgcc atgtgtaagt tgtaaggatt gcctttgtag 2280
ttaatgtact ctttggtttt gtttgtttgt tttcttcttc agtgaagcag ctttactatt 2340
catagaaggg ctagaatagg agaaaaatgaa aggtagtgtg taattctttg ataagatgag 2400
gaaataatgg gaaagggtga attaattcct gggcatggac taccagatga ccacaagttg 2460
cgttgaggcc gcatctttct tcagcagcgt gcaatagctg gctcctctat aggagatgag 2520
cttcattggg agttcctagc aagttgacta aacagcaaaa gttctttctc gtgggtaaat 2580
atacccacag gttctatgat ttgtagctct aggtttcttg atgatcaagg agtgaagtaa 2640
ttgacaggga aaatatagac ctatgataaa taaccaggaa gcattgcttt tggacaagga 2700
agaacagagg gttttgattt taaaaagaag aaaaaaaaaac cttatttttt ctttcttggc 2760
ctcaagtcca atatggagag gattgcttcc ctgaatcctc tcttccttcc ctttttagag 2820

```

```

<210> 3
<211> 334
<212> PRT
<213> Homo sapiens

```

```
<400> 3
```

```
Met Ser Gln Ser Lys Gly Lys Lys Arg Asn Pro Gly Leu Lys Ile Pro
1          5          10          15
```

```
Lys Glu Ala Phe Glu Gln Pro Gln Thr Ser Ser Thr Pro Pro Arg Asp
          20          25          30
```

```
Leu Asp Ser Lys Ala Cys Ile Ser Ile Gly Asn Gln Asn Phe Glu Val
          35          40          45
```

```
Lys Ala Asp Asp Leu Glu Pro Ile Met Glu Leu Gly Arg Gly Ala Tyr
          50          55          60
```

```
Gly Val Val Glu Lys Met Arg His Val Pro Ser Gly Gln Ile Met Ala
65          70          75          80
```

```
Val Lys Arg Ile Arg Ala Thr Val Asn Ser Gln Glu Gln Lys Arg Leu
          85          90          95
```

EX03-078C-US patentin.txt

Leu Met Asp Leu Asp Ile Ser Met Arg Thr Val Asp Cys Pro Phe Thr
 100 105 110
 Val Thr Phe Tyr Gly Ala Leu Phe Arg Glu Gly Asp Val Trp Ile Cys
 115 120 125
 Met Glu Leu Met Asp Thr Ser Leu Asp Lys Phe Tyr Lys Gln Val Ile
 130 135 140
 Asp Lys Gly Gln Thr Ile Pro Glu Asp Ile Leu Gly Lys Ile Ala Val
 145 150 155 160
 Ser Ile Val Lys Ala Leu Glu His Leu His Ser Lys Leu Ser Val Ile
 165 170 175
 His Arg Asp Val Lys Pro Ser Asn Val Leu Ile Asn Ala Leu Gly Gln
 180 185 190
 Val Lys Met Cys Asp Phe Gly Ile Ser Gly Tyr Leu Val Asp Ser Val
 195 200 205
 Ala Lys Thr Ile Asp Ala Gly Cys Lys Pro Tyr Met Ala Pro Glu Arg
 210 215 220
 Ile Asn Pro Glu Leu Asn Gln Lys Gly Tyr Ser Val Lys Ser Asp Ile
 225 230 235 240
 Trp Ser Leu Gly Ile Thr Met Ile Glu Leu Ala Ile Leu Arg Phe Pro
 245 250 255
 Tyr Asp Ser Trp Gly Thr Pro Phe Gln Gln Leu Lys Gln Val Val Glu
 260 265 270
 Glu Pro Ser Pro Gln Leu Pro Ala Asp Lys Phe Ser Ala Glu Phe Val
 275 280 285
 Asp Phe Thr Ser Gln Cys Leu Lys Lys Asn Ser Lys Glu Arg Pro Thr
 290 295 300
 Tyr Pro Glu Leu Met Gln His Pro Phe Phe Thr Leu His Glu Ser Lys
 305 310 315 320
 Gly Thr Asp Val Ala Ser Phe Val Lys Leu Ile Leu Gly Asp
 325 330